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22 July 1955

MEMORANDUM FOR: AD/RR

SUBJECT : Petroleum Supply, Storage Facilities and Refinery Equipment in Northern USSR, [redacted]

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25X1A 1. As discussed by [redacted] of your office and [redacted] detailed information in response to the following questions is needed:

a. From what area does the USSR draw its Northern oil supplies?

b. By what routes is oil transported to the Northern parts of the USSR?

c. What are the junction points and potential bottle necks in the supply line of northbound oil which could be destroyed by air power in event of war?

d. What type of oil refinery equipment is utilized in the Soviet Union, with emphasis on the Northwestern and Arctic areas of the USSR? In this connection it is noted that the refinery equipment for the Pechora refinery (at Uchta) was supplied by the United States in 1942.

2. Inasmuch as this information is needed before 28 July 1955, we are not asking for a complete study to be prepared or a "finished" report provided.

25X1A [redacted]

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Office Memorandum • UNITED STATES GOVERNMENT

TO : Chief, Planning and Review Staff, ORR DATE: 26 July 1955
Attention: [redacted]
THRU : Chief, Materials Division, ORR
FROM : Acting Chief, Petroleum Branch D/M/RR

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SUBJECT: Project 25.943, Transmission of data requested on Soviet Oil Supply, Storage Facilities and Oil Refinery Equipment in the Northern Regions of the USSR.

1. Transmitted herewith is original and 3 copies of data and information on Soviet Oil Supply, Storage Facilities and Oil Refinery Equipment in the Northern Regions of the USSR.

2. The data and information are arranged in accordance with the specific request as shown in the memorandum 21 July 1955 for [redacted] Attention [redacted] i.e., by subdivisions 1. a, b, c, and d.

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3. Northern Regions of the USSR are assumed to be those regions lying north of 60° latitude.

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Attachment
CIM:sw

ORR/IP-402
ORR M/P Project 25.943

Information on Soviet Oil Supply, Storage Facilities and Oil Refinery Equipment in the Northern Regions of the USSR.

26 July 1950.

Project 25.943: Information on Soviet Oil Supply, Storage Facilities and Oil Refinery Equipment in the Northern Regions of the USSR

The following information is given, insofar as it is available, in response to the specific queries quoted from the advanced memo request dated 21 July 1955, [redacted] 25X1A

1a. From what area does the USSR draw its northern oil supplies?

The oil and gas fields of the Pechora River basin are the only known sources of current petroleum production in the northern regions of the USSR. These fields are near the city of Ukhta which is on the railroad from Kotlas to Vorkuta. In the immediate neighborhood of Ukhta lie the oil fields of Yareyga and Chibiew, while the Vat-Kolan field is south of Ukhta. Two gas fields have been reported in the area, one at Izma southeast of Ukhta, and the Gverdyn gas field midway between Ukhta and Molotov.

Some of the crude oil produced at Ukhta comes from mining operations. This is a feasible extraction method for the high pour point oil found in those deposits, which are assumed to lie at a relatively shallow depth and within the permafrost zone.

1b. By what routes is oil transported to the northern parts of the USSR?

It is assumed that the refinery at Ukhta supplies the major portion of products required for consumption in the Northwest region. Special products such as kerosene and others required for civil and military use are reportedly transported into this region by rail for delivery at Arkhangelsk, Ukhta, and Vorkuta.

The northern regions of the USSR east of the Urals Mountains are supplied entirely by water transportation. The principal rivers used to carry petroleum

shipments north to the Arctic Ocean are the Ob, the Yenisey, and the Lena. Tankers from Vladivostok transport petroleum to Sakhalin Island, Kamchatka, Magadan, and the Chukotsk Peninsula. During the summer months some petroleum is transported across the Arctic Sea route from Murmansk or Arkhangelsk.

The petroleum shipped northward by river barge comes across the Trans-Siberian Railroad to a junction point. Shipments on the Yenisey River leave the railroad at Krasnoyarsk. The branch rail line, Tayshet to Osetrovo, carries petroleum to the Lena River. At Osetrovo it is loaded on river barges for shipment down the Lena to Yakutsk and on north. The petroleum shipped out of Vladivostok by tanker arrives at the port via the Far Eastern Railroad from Khabarovsk. The railroads would thus be the principal bottlenecks in the supply of oil to northern ports.

A 55-mile, 8-inch pipeline is reported to be in operation from Magadan on the Sea of Okhotsk, northward to Palatka, approximately on the 60° parallel of latitude. This is the first segment of a planned pipeline northward to Kolyma, for the purpose of delivering petroleum products to the gold fields in that area. Additional construction on this line may have been completed.

1c. What are the junction points and potential bottle necks in the supply line of northbound oil which could be destroyed by air power in event of war?

In addition to the information given on transportation and distribution under 1a and 1b, the following data on petroleum products storage are submitted.

PETROLEUM PRODUCTS STORAGE FACILITIES - USSR

North at 60 Latitude

(Capacities stated according to best estimate for 1 January 1956)

Economic Region	Coordinates		Estimated Capacity Thous. Metric Tons
REGION I			
Leningrad	59-53	30-23	128
Kronshtadt	60-00	29-45	40
Molotovsk	64-34	39-48	29
Arkhangelsk	64-30	40-35	25.6
Kem	64-57	34-36	12.5
Lapландiya	68-14	33-21*	11
Livakhaari	69-37	31-53	8.5
Kharovsk	59-57	40-10	8.4
Svirstroy	60-37	33-17	8.4
Murmansk	68-53	33-04	8
Rosta	69-01	33-05	8
Monchegorsk	67-54	32-59*	8
Petrodvorets	59-53	29-49	5.6
Volkov	59-56	32-18*	5
Vyborg	60-45	28-45	5
Petrozavodsk	61-47	34-22	5
Podosh	61-48	36-24	5
Velsk	61-05	42-08*	4
Iokanga	68-03	39-31	3.5
Kotlin	59-58	29-47	3.2
Inta	66-09	61-10	3.0
Kem	64-57	34-35	2.7
Vytegra	61-01	36-26	2.6
Lomonsov	59-54	29-48	2.5
Kirovsk	67-38	33-42	2.1
Vorkuta	67-30	64-00*	2.1
Vayenga	69-05	33-28	2.0

REGION XI			
Igarka	67-40	86-34*	5
Nordvik	73-37	110-45*	5
Norilsk	69-20	88-06*	2
Dudinka	69-30	86-10*	20 (?)
REGION XII			
Provideniya	64-27	173-10**	12
Atka	60-50	151-48*	5

* City coordinates.
** Approximate coordinates.

ld. What type of oil refinery equipment is utilized in the Soviet Union with emphasis on the northwestern and Arctic areas of the USSR? In this connection it is noted that the refinery equipment for the Pechora refinery (at Ukhta) was supplied by the United States in 1942.

In the northern regions of the USSR the only known petroleum refining facilities are the relatively minor installations at Ukhta, on the Pechora River. The Ukhta refining facilities have an estimated capacity for crude oil input of 250,000 metric tons per year. The Ukhta installations are believed to consist mostly of simple equipment for the primary distillation of crude oil. Auxiliary facilities are presumably present for the preparation of petroleum products primarily of the straight-run type, chiefly motor gasoline, kerosene, gas oil products, and mazut (residual fuel oil). Complex refining units such as those for catalytic cracking are not indicated to be present, although there may be small capacity for thermal cracking. There are no known facilities for lubricant output at Ukhta.